NUREG-1714

Draft
Environmental Impact Statement
for the Construction and Operation of an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians and the Related Transportation Facility in Tooele County, Utah

Docket No. 72-22
Private Fuel Storage, L.L.C.

U.S. Nuclear Regulatory Commission
Office of Nuclear Material Safety and Safeguards

U.S. Bureau of Indian Affairs
U.S. Bureau of Land Management
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ABSTRACT

Private Fuel Storage, L.L.C. (PFS), proposes to construct and operate an independent spent fuel storage installation on the Reservation of the Skull Valley Band of Goshute Indians. The Reservation is located geographically within Skull Valley in Tooele County, Utah. Spent nuclear fuel would be transported by rail from existing power reactor sites to Skull Valley. To transport the spent nuclear fuel from the existing rail line in Skull Valley to the proposed independent spent fuel storage installation, PFS proposes to construct and operate a rail siding and 51-km (32-mile) rail line from Skunk Ridge (near Low, Utah) to the Reservation.

This draft environmental impact statement evaluates the potential environmental impacts of the PFS proposal. The document discusses the purpose and need for the PFS proposal, describes the proposed action and its reasonable alternatives, describes the environment potentially affected by the proposal, presents and compares the potential environmental impacts resulting from the proposed action and its alternatives, and identifies mitigation measures that could eliminate or lessen the potential environmental impacts.

The PFS proposal requires approval from four federal agencies: the U.S. Nuclear Regulatory Commission, the U.S. Department of Interior's Bureau of Indian Affairs and Bureau of Land Management, and the U.S. Surface Transportation Board. The actions required of these agencies are administrative. The environmental issues that each of these agencies must evaluate pursuant to the National Environmental Policy Act of 1969 (NEPA) are interrelated; therefore, the agencies have cooperated in the preparation of this draft environmental impact statement, and this document serves to satisfy each agency's statutory responsibilities under NEPA.

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
µCi	micro-curies
µg	microgram
ABS	automatic block system
ACE	U.S. Army Corps of Engineers
ACEC	areas of critical environmental concern
ADT	average daily traffic
AIRS	Aerometric Information Retrieval System
ALARA	as low as reasonably achievable
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BLS	Bureau of Labor Statistics
BMP	best management practices
BNSF	Burlington Northern Santa Fe (Railway)
BWR	boiling-water reactor
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CESQG	Conditionally Exempt Small Quantity Generator
CFR	*Code of Federal Regulations*
cfs	cubic feet per second
Ci	Curie
cm	centimeter
CO	carbon monoxide
CTC	centralized traffic control
CWA	Clean Water Act
dB(A)	decibels (on the A-weighted scale)
DEIS	draft environmental impact statement
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
DOT	U.S. Department of Transportation
EIS	environmental impact statement
EJ	environmental justice
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ER	environmental report
ERI	Energy Resources International

Fed. Reg.	*Federal Register*
FEIS	final environmental impact statement
ft	feet
FWS	U.S. Fish and Wildlife Service
g	gram
gal	gallons
gpm	gallons per minute
ha	hectare
HMP	habitat management plan
hr	hour
ICRP	International Commission on Radiological Protection
ISB	intermountain seismic belt
ISCST	Industrial Source Complex Short-Term (air dispersion model)
ISFSI	independent spent fuel storage installation
ITF	Intermodal Transfer Facility
kg	kilogram
km	kilometer
kW	kilowatt
L	liter
LCF	latent cancer fatality
L.L.C.	Limited Liability Company
LOS	level of service
m	meter
m^3	cubic meters
MEI	maximally exposed individual
MGTM	million gross ton-miles per mile
min	minute
mrem	millirem
MRS	monitored retrievable storage (facility)
MTU	metric tons of uranium
mSv	milliSievert
MWD/MTU	megawatt-days per MTU
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NMSS	Nuclear Material Safety and Safeguards
NPDES	National Pollutant Discharge Elimination System
NOI	Notice of Intent
NO_2	nitrogen oxide
NRC	U.S. Nuclear Regulatory Commission
NRHP	National Register of Historic Places
NWN	Nuclear Waste Negotiator

NWPA	Nuclear Waste Policy Act of 1982
NWPAA	Nuclear Waste Policy Amendments Act of 1987
O_3	ozone
OCA	owner-controlled area
OFF	oldest fuel first
OHV	off-highway vehicle
OSHA	Occupational Safety and Health Administration
Pb	lead
pCi	pico-Curies
PFS	Private Fuel Storage, L.L.C.
PFSF	Private Fuel Storage Facility
pH	a unit of measure for acidity (lower numbers) and alkalinity (higher numbers)
PM-10	particulate matter less than 10 microns in diameter
PMF	probable maximum flood
PNL	Pacific Northwest Laboratory
ppm	parts per million
PSD	Prevention of Significant Deterioration
PWR	pressurized-water reactor
R8W	Range 8 West
RCRA	Resource Conservation and Recovery Act
RMP	resource management plan
ROD	Record of Decision
SAR	Safety Analysis Report
SDWA	Safe Drinking Water Act
SER	Safety Evaluation Report
SHPO	State Historic Preservation Office
SLCIA	Salt Lake City International Airport
SNF	spent nuclear fuel
SO_2	sulfur dioxide
SPCC	spill prevention, control, and countermeasures
STB	U.S. Surface Transportation Board
Sv	Sievert
T5S	Township 5 South
THPO	Tribal Historic Preservation Office
TLD	thermoluminescent dosimeter
UPDES	Utah Pollution Discharge Elimination System
USC	*United States Code*
UDWR	Utah Division of Wildlife Resources
VOCs	volatile organic compounds
WSA	wilderness study area
WHA	wildlife habitat area

yd^3	cubic yards
yr	year